

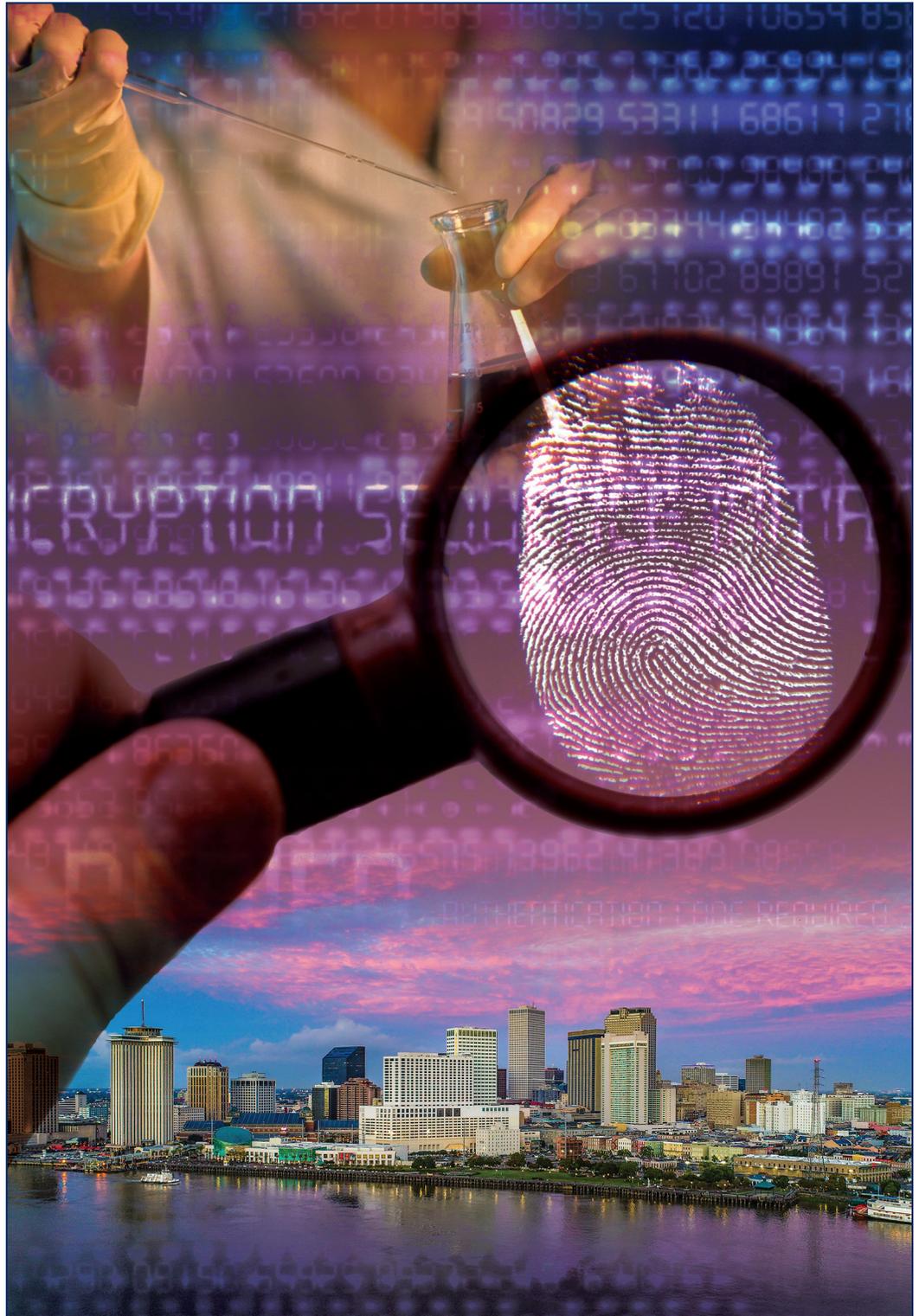


DEA  
INTELLIGENCE  
REPORT

# National Forensic Laboratory Information System (NFLIS) Data Findings for Synthetic Cannabinoid Substances and Synthetic Cathinones in the New Orleans Field Division

DEA-NOX-DIR-011-20

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# Executive Summary

The Drug Enforcement Administration (DEA) New Orleans Field Division (FD) conducted a five-year review of the data on synthetic substances reported in the National Forensic Laboratory Information System (NFLIS) for their area of responsibility (AOR). The findings revealed that Louisiana submitted the majority of reports for synthetic cannabinoid substance and synthetic cathinones substance for 2013 to 2017. Synthetic cannabinoid substance and synthetic cathinones are classified as new psychoactive substances (NPS).

Analysis of these data sets confirms the NPS market in the New Orleans FD continues to be very dynamic and is characterized by the emergence of large numbers of new substances belonging to diverse chemical groups. Furthermore, the data sets underscore the significant role that Louisiana plays in the NPS trade within the Gulf Coast region.

Although not the number one drug threat in the DEA New Orleans FD/s AOR, synthetic cannabinoids and cathinones are widely available and most commonly sold in headshops, gas stations, and convenience stores. Synthetic cannabinoids and cathinones are often labeled “not for human consumption” and are sold in colorful packaging and bottles to attract consumers. The majority of respondents to the Gulf Coast High Intensity Drug Trafficking Area (HIDTA) 2020 Drug Survey reported the availability of NPS’ as moderate, with 38 percent citing an increase in availability over the past 12 months.

New psychoactive substances have no legitimate industrial or medical use. The misuse of these chemicals in the past decade represents an ongoing public health and safety threat. During 2010–2015, among 456 cases of synthetic cannabinoid intoxication among patients treated by U.S. medical toxicologists, 277 (61 percent) had reports of synthetic cannabinoids as the sole toxicological agent. Three deaths were recorded, one with synthetic cannabinoids given as the sole agent and two with multiple agent exposures. Synthetic cannabinoid poisonings increased in all U.S. Census regions. The increase in acute synthetic cannabinoid poisonings underscores the importance of targeted prevention interventions and the need for education about the potentially life-threatening consequences of synthetic cannabinoid use.

Product inconsistency poses a serious concern for those who abuse NPSs. Importers and retail traffickers care little about the chemical makeup of their product or how it may impact a user. Those who use NPSs risk their physical and mental health when consuming these substances, as they are unregulated and can vary in potency with each batch. The American Association of Poison Control Centers (AAPCC) report that as of August 2019, poison control centers have managed 808 calls for synthetic cannabinoid-related exposure cases. Sixty-five (8 percent) of the 808 calls were from poison control centers within the New Orleans FD’s AOR (26 calls in Alabama, 5 in Arkansas, 22 in Louisiana, and 12 in Mississippi).

NFLIS represents an important DEA resource in monitoring illicit drug abuse and trafficking. NFLIS is a DEA program that systematically collects results from drug chemistry analysis conducted by state, local, and federal forensic laboratories across the country. As a national drug forensic laboratory reporting system, NFLIS provides detailed analytical results of drugs seized by law enforcement personnel. Annual raw counts or the number

## (U) Figure 1. The National Forensic Laboratory Information System (NFLIS)

NFLIS is a DEA program that systematically collects drug chemistry analysis results, as well as other related information, from cases analyzed by participating state, local, and federal forensic laboratories. These laboratories analyze substances secured in law enforcement operations across the country. NFLIS data are used to support drug regulatory and scheduling efforts as well as to inform drug policy, drug enforcement, and health initiatives both nationally and in local communities.

Source: DEA

of reports of drugs recorded and submitted by drug laboratories to NFLIS is dependent on the number of reporting laboratories for that period. It is important to note that the number of NFLIS drug laboratories reporting in the New Orleans FD's AOR was consistent during the period of review and did not vary from year to year. The same laboratories in the New Orleans FD's AOR reported to NFLIS from 2013 to 2017.

Synthetic cannabinoids consist of chemicals commonly applied to plant material or smoked in an oil form for e-cigarettes. Synthetic cathinones are powdered or crystal chemicals consumed in the form of powder, tablets, or capsules. The composition and potency of the substances contained in the products is often unknown. The scientific information available for the products and their effects on a person's health is limited.

## Details

Producers of these synthetic substances require relatively sophisticated equipment along with a modicum of skill and knowledge of chemistry to produce. This creates a barrier to entry for unskilled producers or traffickers. As these substances are widely available in China and other Asian and European countries, most U.S.-based traffickers can purchase the drugs already synthesized and have them shipped through mail carriers. They then perform the final processing and packaging of the substances domestically. Spice processing laboratories are the sites used for the final processing of synthetic cannabinoids and the application of these substances to plant material. Synthetic cathinones are ready to use in their powder and crystal forms.

From January 1, 2013 through December 31, 2017, NFLIS state and local drug laboratories in the New Orleans FD's AOR submitted 27,030 synthetic cannabinoid substance reports: 3,262 reports from Alabama (12 percent); 1,924 reports from Arkansas (7 percent); 20,521 reports from Louisiana (76 percent); and 1,323 reports from Mississippi (5 percent). Synthetic cannabinoids, AB-CHMINACA, and AB-FUBINACA were the three most identified synthetic substances for 2013-2017, as 9,821 reports of synthetic cannabinoids (36 percent); 1,904 reports of AB-CHMINACA (7 percent); and 1,867 reports of AB-FUBINACA (7 percent) were made.

From January 1, 2013 through December 31, 2017, NFLIS state and local drug laboratories in the New Orleans FD's AOR submitted 2,347 synthetic cathinones reports: 627 reports from Alabama (27 percent); 314 reports from Arkansas (13 percent); 1,040 reports from Louisiana (44 percent); and 366 reports from Mississippi (16 percent). Ethylone, methylone, and substituted cathinones were the three most identified synthetic cathinones for 2013-2017 time period as 524 reports of ethylone (22 percent); 426 reports of methylone (18 percent); and 400 reports of substituted cathinones (17 percent) were made.

### (U) Figures 2 & 3. K2/Spice



Source: DEA

### (U) Figure 4. Bath Salts/ Synthetic Cathinones

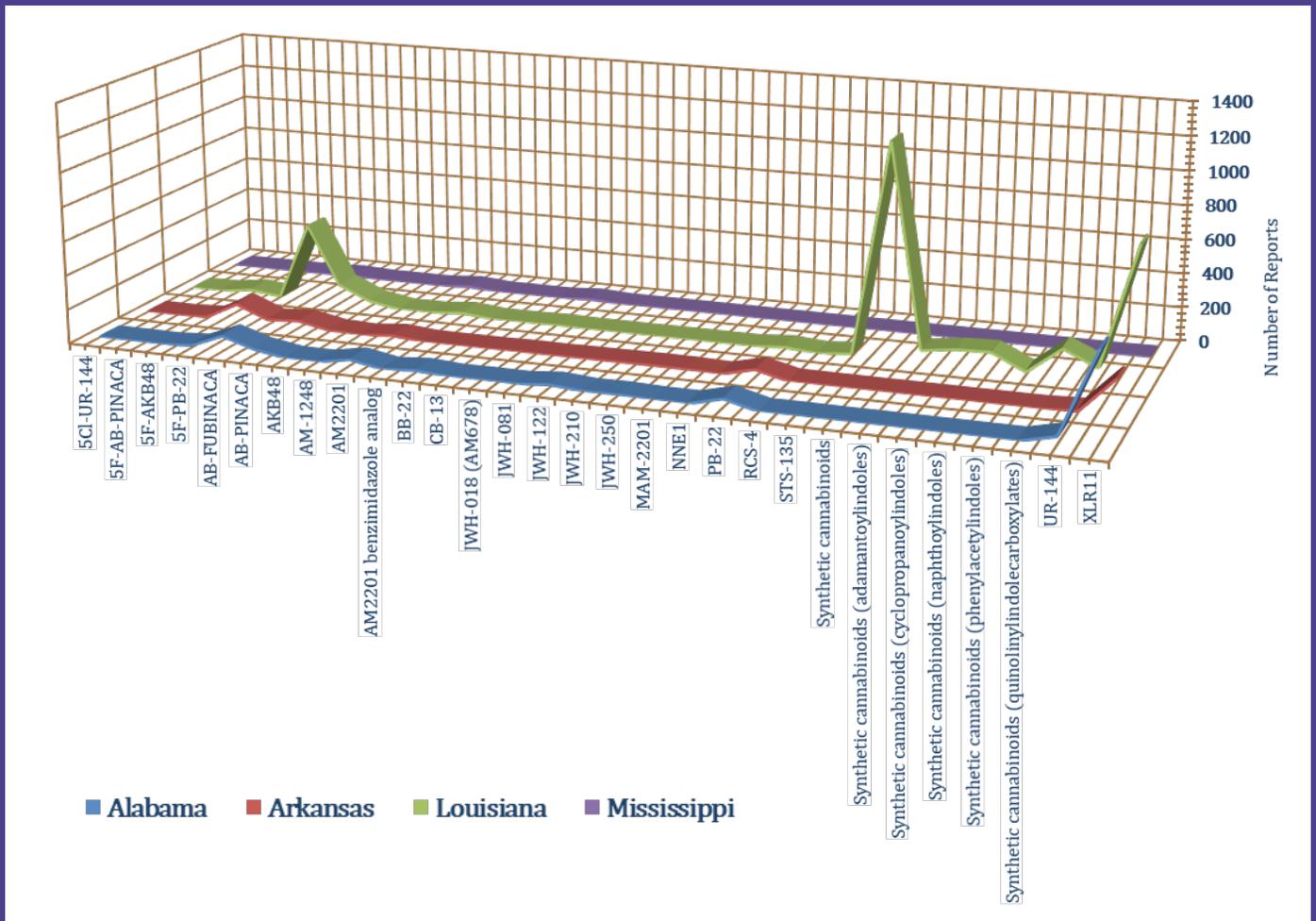


Source: DEA

# 2013 NFLIS Data for the DEA New Orleans Field Division

**Figure 5** represents counts of synthetic cannabinoid substances submitted to laboratories within the DEA New Orleans FD's AOR from January 1, 2013 through December 31, 2013. During 2013, state and local laboratories submitted 4,733 reports: 855 reports from Alabama (18 percent); 511 reports from Arkansas (11 percent); 3,323 reports from Louisiana (70 percent); and 44 reports from Mississippi (0.9 percent). XLR11, synthetic cannabinoids, and AB-FUBINACA were the three most identified synthetic cannabinoid substances for 2013 with 1,548 reports of XLR11 (33 percent), 1,256 reports of synthetic cannabinoids (27 percent) and 588 reports of AB-FUBINACA (12 percent). Louisiana laboratories submitted all 1,256 reports of synthetic cannabinoids.

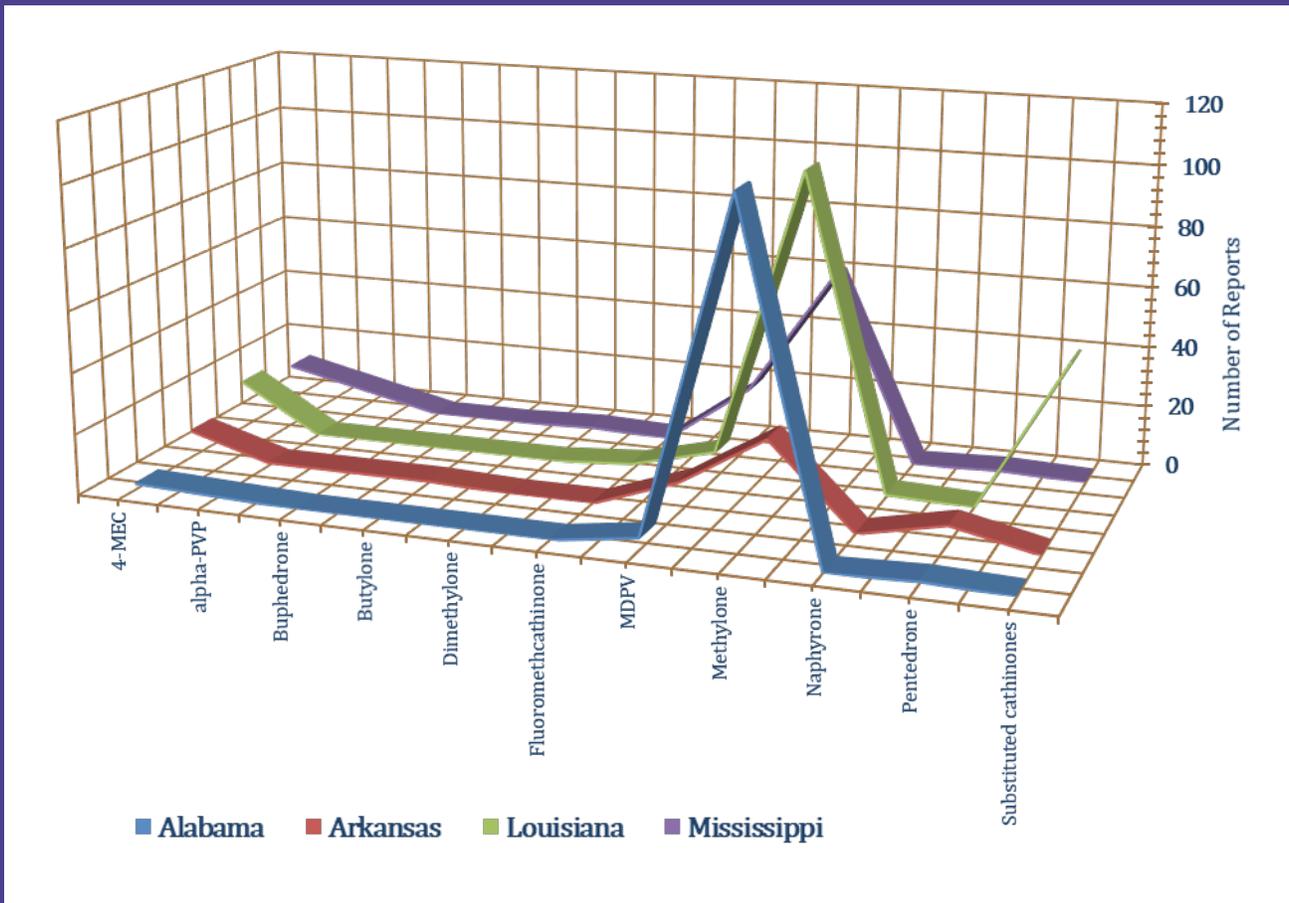
**(U) Figure 5. 2013 DEA New Orleans Field Division: State Counts for Synthetic Cannabinoid Substances**



Source: DEA

**Figure 6** represents counts of synthetic cathinones submitted to laboratories within the DEA New Orleans FD's AOR from January 1, 2013 through December 31, 2013. During 2013, state and local laboratories submitted 456 reports: 119 reports from Alabama (26 percent); 55 reports from Arkansas (12 percent); 181 reports from Louisiana (40 percent); and 101 reports from Mississippi (22 percent). Methylone, substituted cathinones, and MDPV were the three most identified synthetic cathinones in 2013, as 302 reports of methylone (66 percent); 50 reports of substituted cathinones (11 percent); and 43 reports of MDPV (9 percent) were submitted. Louisiana laboratories submitted all 50 reports of substituted cathinones.

**Figure 6. 2013 National Forensic Laboratory Information System Data: State Counts for Synthetic Cathinones**

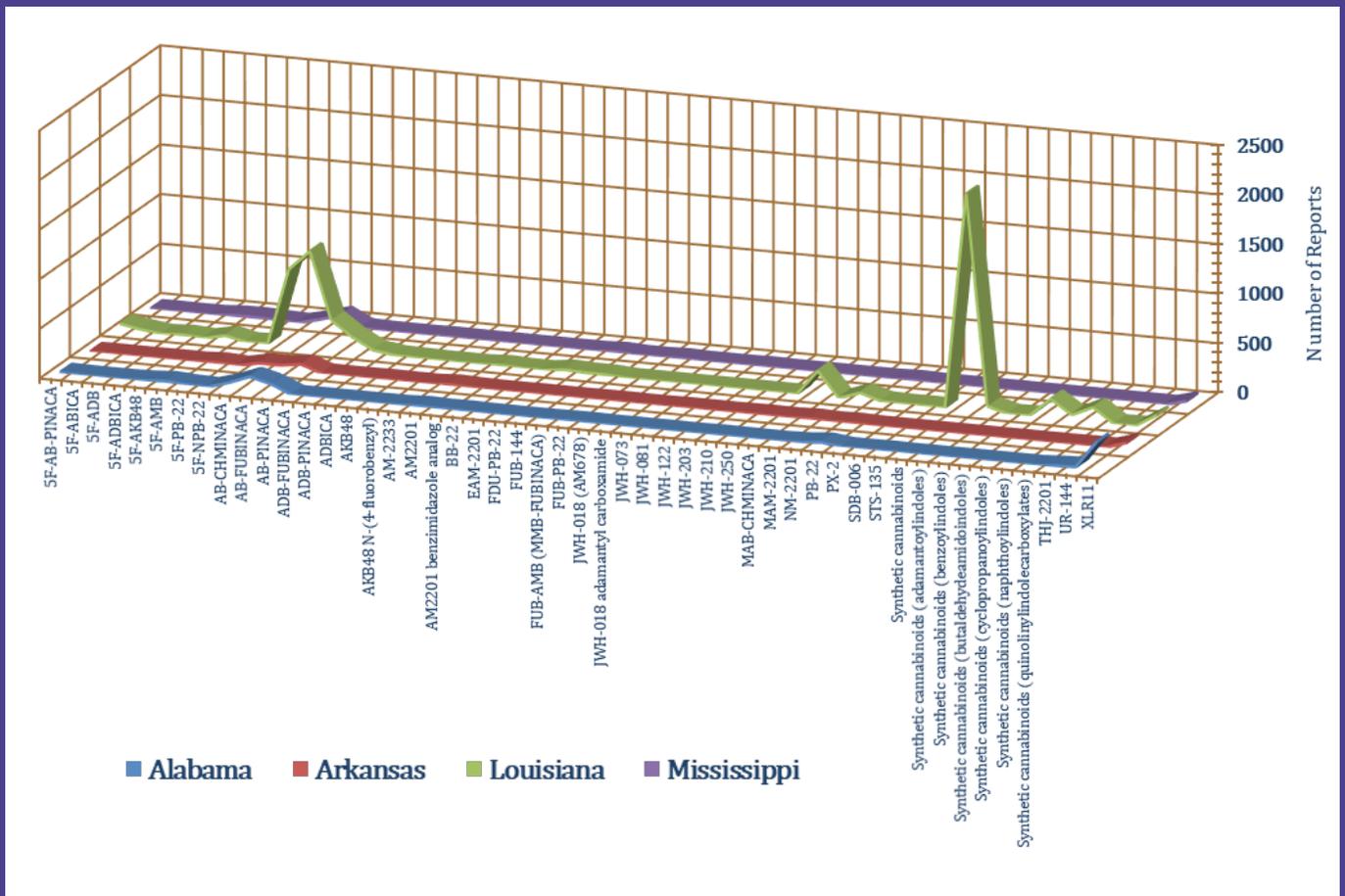


Source: DEA

# 2014 NFLIS Data for the DEA New Orleans Field Division

**Figure 7** represents counts of synthetic cannabinoid substances submitted to laboratories within the DEA New Orleans FD's AOR from January 1, 2014 through December 31, 2014. During 2014, state and local laboratories submitted 6,980 reports: 735 reports from Alabama (11 percent); 314 reports from Arkansas (4 percent); 5,625 reports from Louisiana (81 percent); and 306 reports from Mississippi (4 percent). Synthetic cannabinoids, AB-FUBINACA, and AB-CHMINACA were the three most identified synthetic cannabinoid substances in 2014, as 2,184 reports of synthetic cannabinoids (31 percent); 1,279 reports of AB-FUBINACA (18 percent); and 936 reports of AB-CHMINACA (13 percent) were made. Louisiana laboratories submitted all 2,184 reports of synthetic cannabinoids.

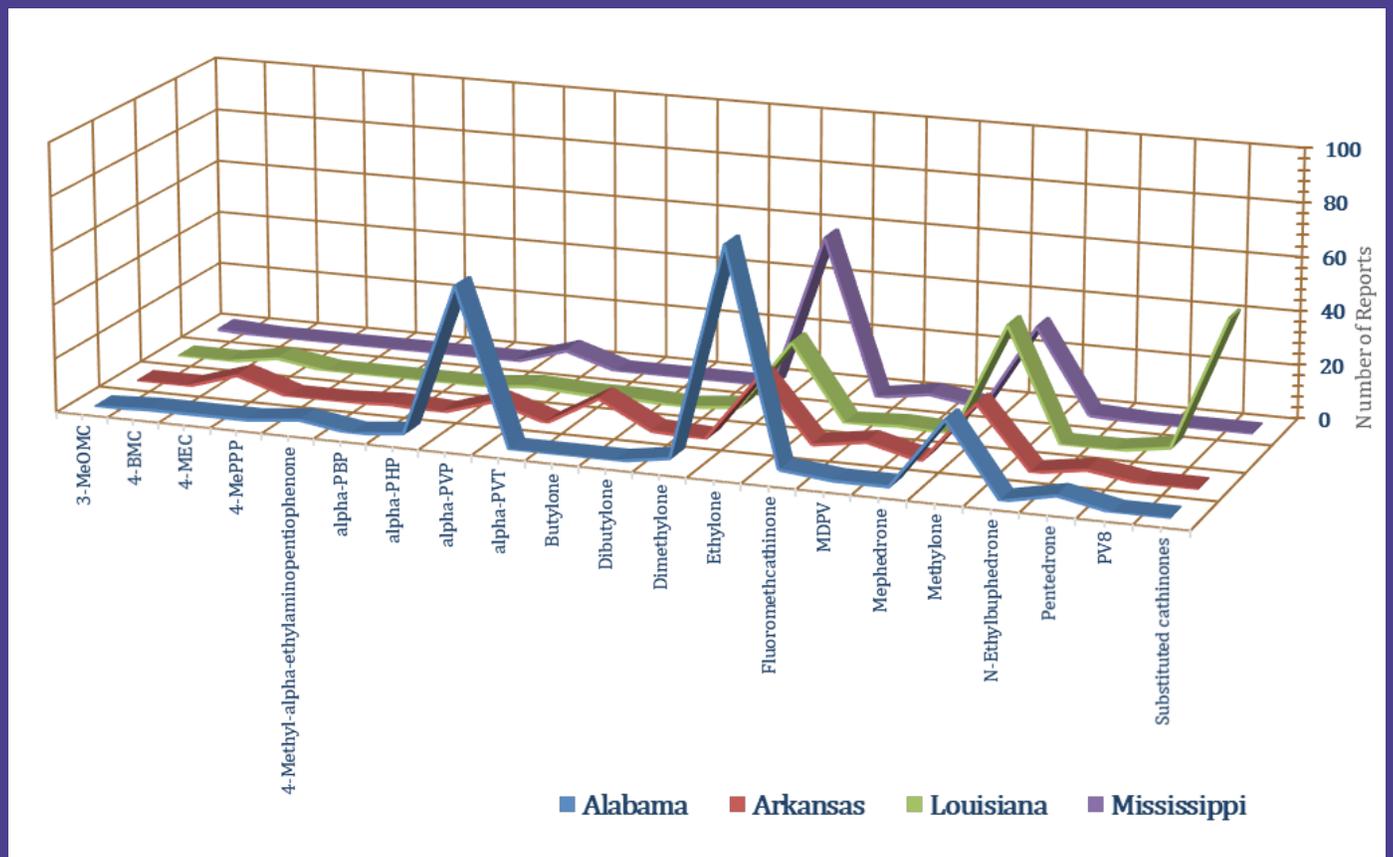
(U) Figure 7. 2014 National Forensic Laboratory Information System Data: State Counts for Synthetic Cannabinoid Substances



Source: DEA

**Figure 8** represents counts of synthetic cathinones submitted to laboratories within the DEA New Orleans FD's AOR from January 1, 2014 through December 31, 2014. During 2014, state and local laboratories submitted 506 reports: 187 reports from Alabama (37 percent); 83 reports from Arkansas (16 percent); 135 reports from Louisiana (27 percent); and 101 reports from Mississippi (20 percent). Ethylone, methylone, and alpha-PVP were the three most identified synthetic cathinones in 2014, as 193 reports of ethylone (38 percent); 124 reports of methylone (25 percent); and 72 reports of alpha-PVP (14 percent) were made.

**(U) Figure 8. 2014 National Forensic Laboratory Information System Data: State Counts for Synthetic Cathinones**



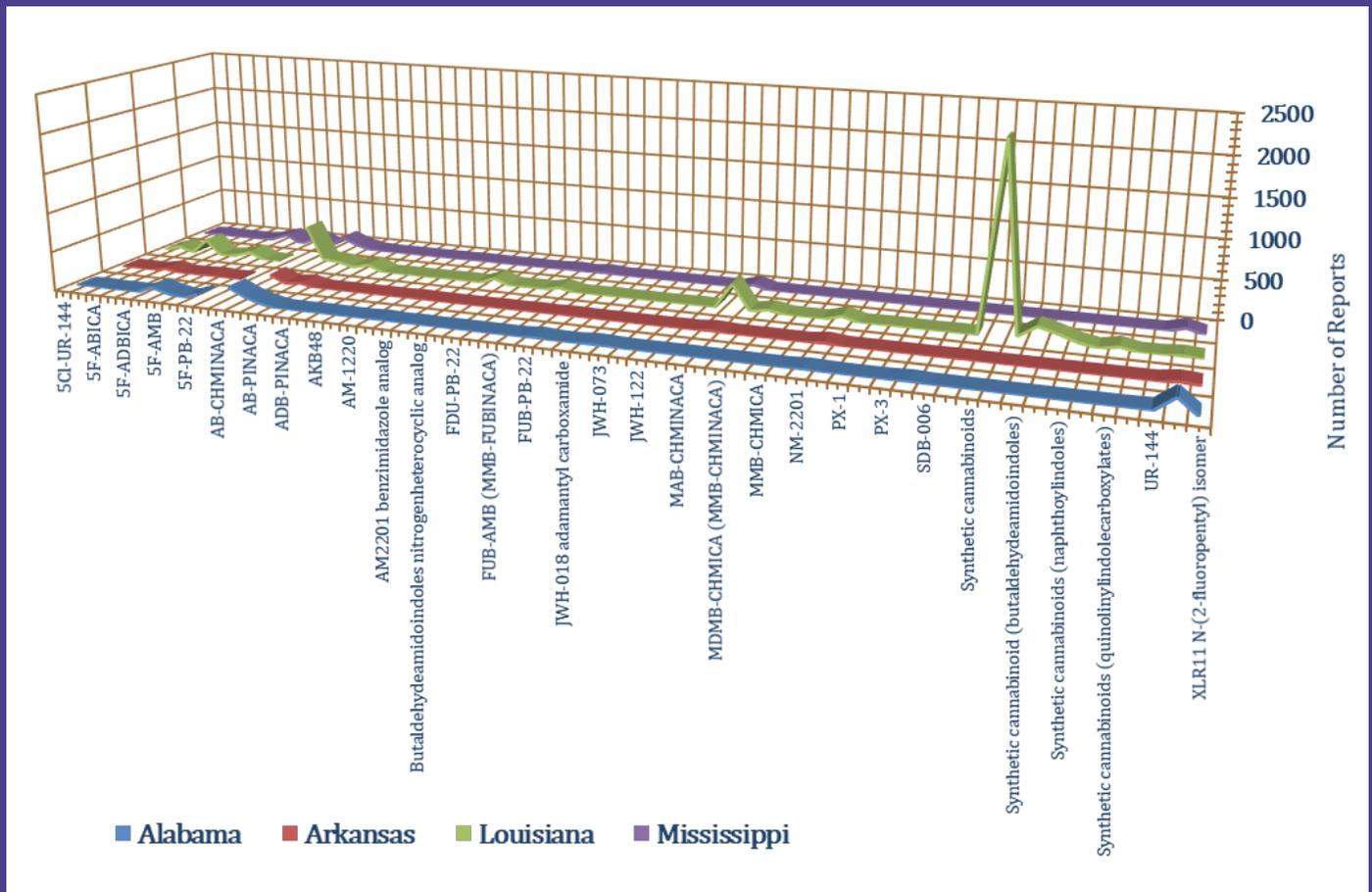
Source: DEA

# 2015 NFLIS Data for the DEA New Orleans Field Division

**Figure 9** represents counts of synthetic cannabinoid substances submitted to laboratories within the DEA New Orleans FD's AOR from January 1, 2015 through December 31, 2015.

During 2015, state and local laboratories submitted 6,454 reports: 848 reports from Alabama (13 percent); 369 reports from Arkansas (6 percent); 4,649 reports from Louisiana (72 percent); and 588 reports from Mississippi (9 percent). Synthetic cannabinoids, AB-CHMINACA, and MAB-CHMINACA were the three most identified synthetic cannabinoid substances in 2015, as 2,338 reports of synthetic cannabinoids (36 percent); 968 reports of AB-CHMINACA (15 percent); and 406 reports of MAB-CHMINACA (6 percent) were made. Louisiana laboratories submitted all 2,338 reports of synthetic cannabinoids.

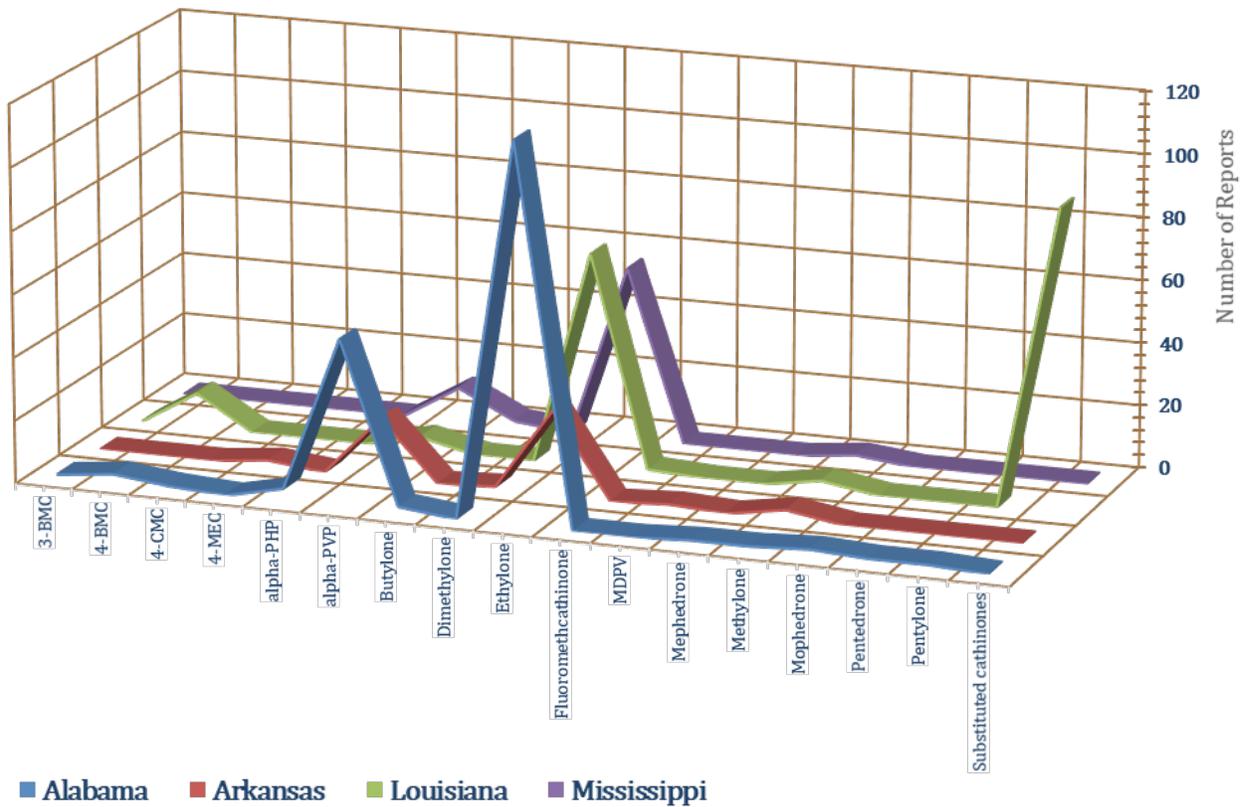
**(U) Figure 9. 2015 National Forensic Laboratory Information System Data: State Counts for Synthetic Cannabinoid Substances**



Source: DEA

**Figure 10** represents counts of synthetic cathinones submitted to laboratories within the DEA New Orleans FD's AOR from January 1, 2015 through December 31, 2015. During 2015, state and local laboratories submitted 496 reports: 190 reports from Alabama (38 percent); 53 reports from Arkansas (11 percent); 183 reports from Louisiana (37 percent); and 70 reports from Mississippi (14 percent). Ethylone, synthetic cathinones, and alpha-PVP were the three most identified synthetic cathinones in 2015, as 270 reports of ethylone (54 percent); 96 reports of substituted cathinones (19 percent); and 87 reports of alpha-PVP (18 percent) were submitted. Louisiana laboratories submitted all 96 reports of substituted cathinones.

**(U) Figure 10. 2015 National Forensic Laboratory Information System Data: State Counts for Synthetic Cathinones**

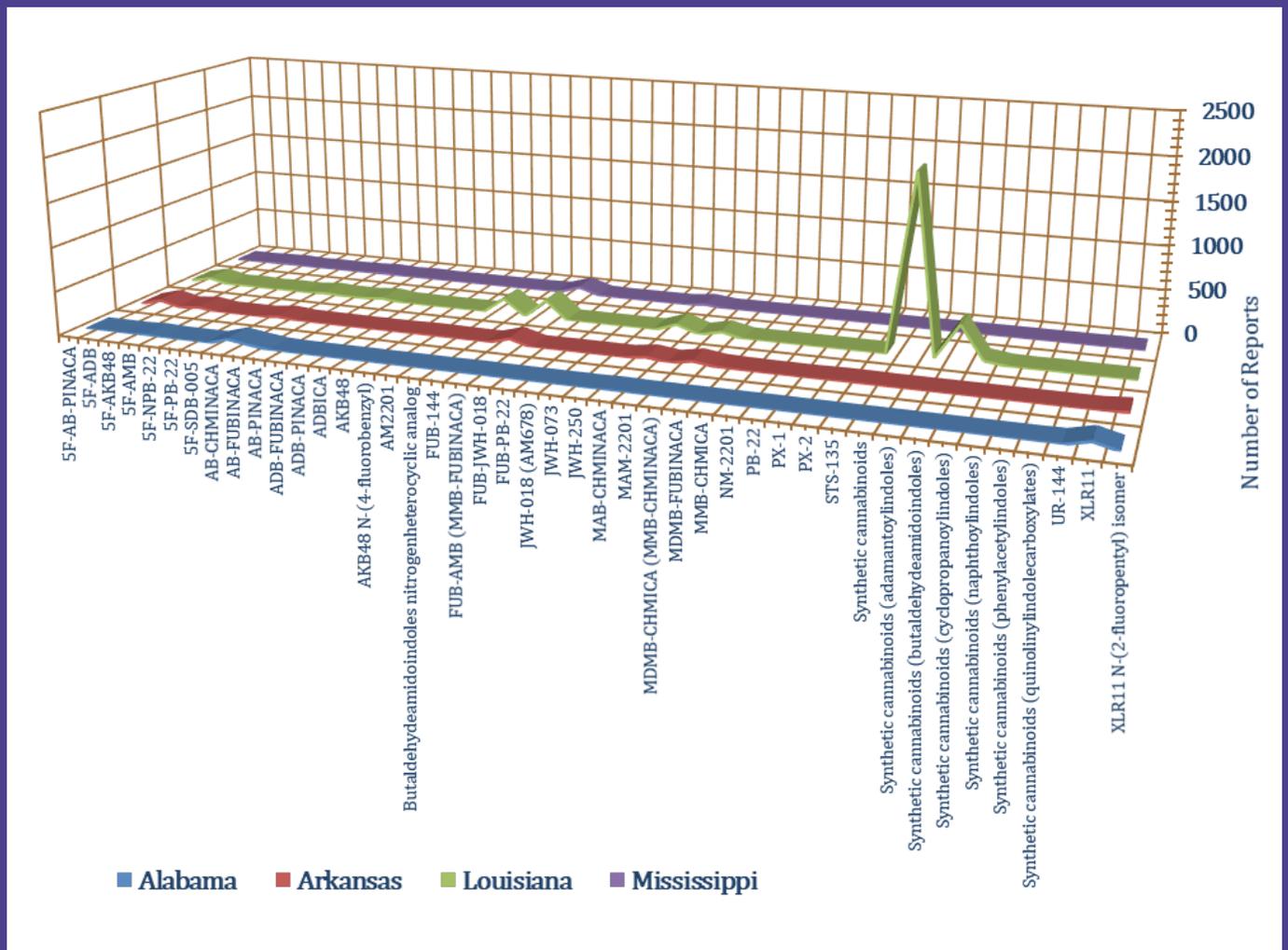


Source: DEA

# 2016 NFLIS Data for the DEA New Orleans Field Division

**Figure 11** represents counts of synthetic cannabinoid substances submitted to laboratories within the New Orleans FD's AOR from January 1, 2016 through December 31, 2016. During 2016, state and local laboratories submitted 3,963 reports: 202 reports from Alabama, 361 reports from Arkansas, 3,211 reports from Louisiana and 189 reports from Mississippi. The following three synthetic cannabinoid substances were most identified in 2016: 2,017 reports of synthetic cannabinoids (51 percent); 412 reports of synthetic cannabinoids (butaldehydeamidoindoles) (10 percent); and 367 reports of FUB-AMB (MMB-FUBINACA) (9 percent). Louisiana laboratories submitted all the synthetic cannabinoids and synthetic cannabinoids (butaldehydeamidoindoles) reports.

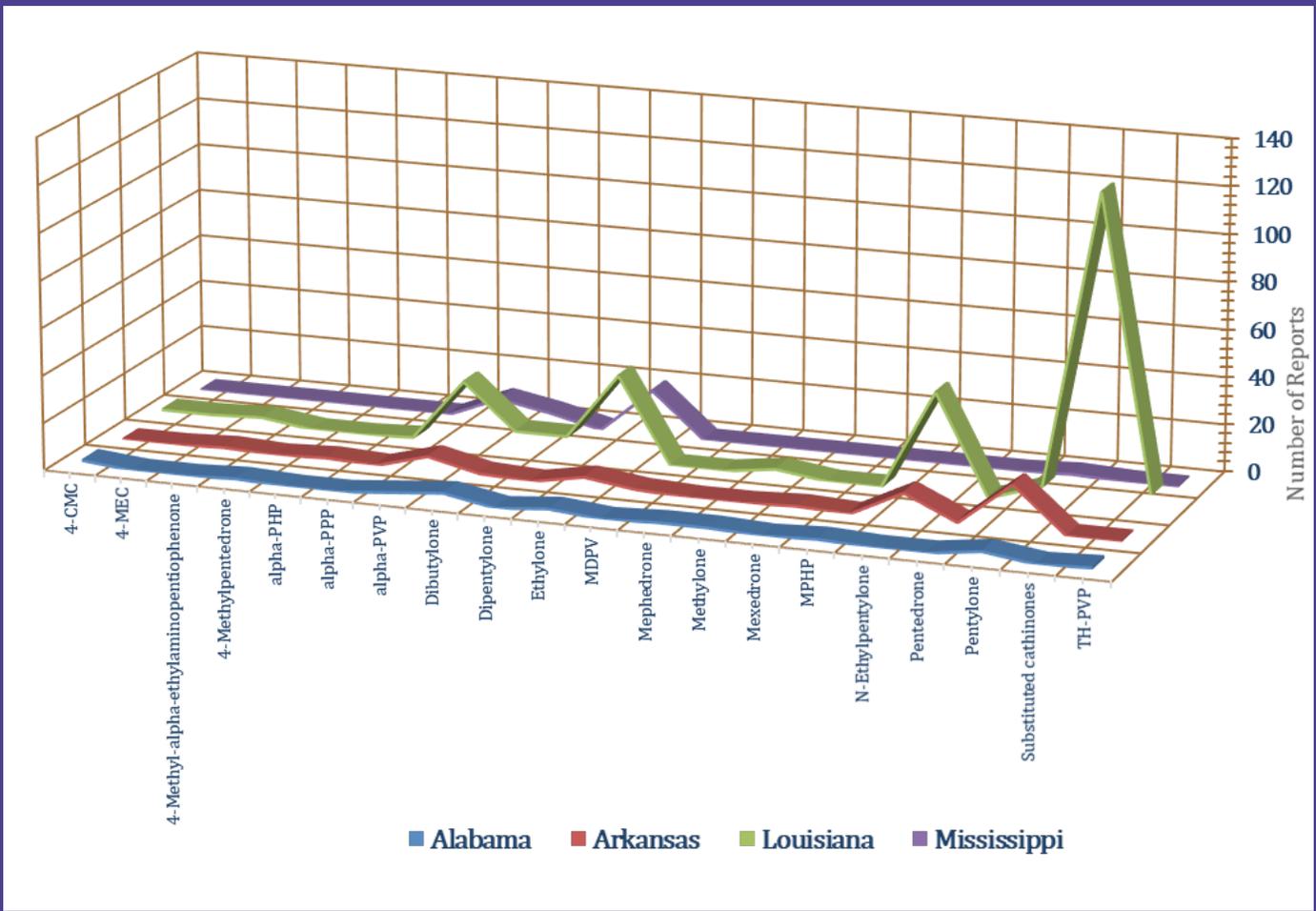
**(U) Figure 11. 2016 DEA New Orleans Field Division: State Counts for Synthetic Cannabinoid Substances**



Source: DEA

**Figure 12** represents counts of synthetic cathinones submitted to laboratories within the DEA New Orleans FD's AOR from January 1, 2016 through December 31, 2016. During 2016, state and local laboratories submitted 376 reports: 18 reports from Alabama (5 percent); 46 reports from Arkansas (12 percent); 278 reports from Louisiana (74 percent); and 34 reports from Mississippi (9 percent). Substituted cathinones, ethylone, and N-ethylpentylone were the three most identified synthetic cathinones in 2016, as 131 reports of substituted cathinones (35 percent); 61 reports of ethylone (16 percent); and 53 reports of N-ethylpentylone (14 percent) were made. Louisiana laboratories submitted all the substituted cathinones reports.

**(U) Figure 12. 2016 DEA New Orleans Field Division: State Counts for Synthetic Cathinones**

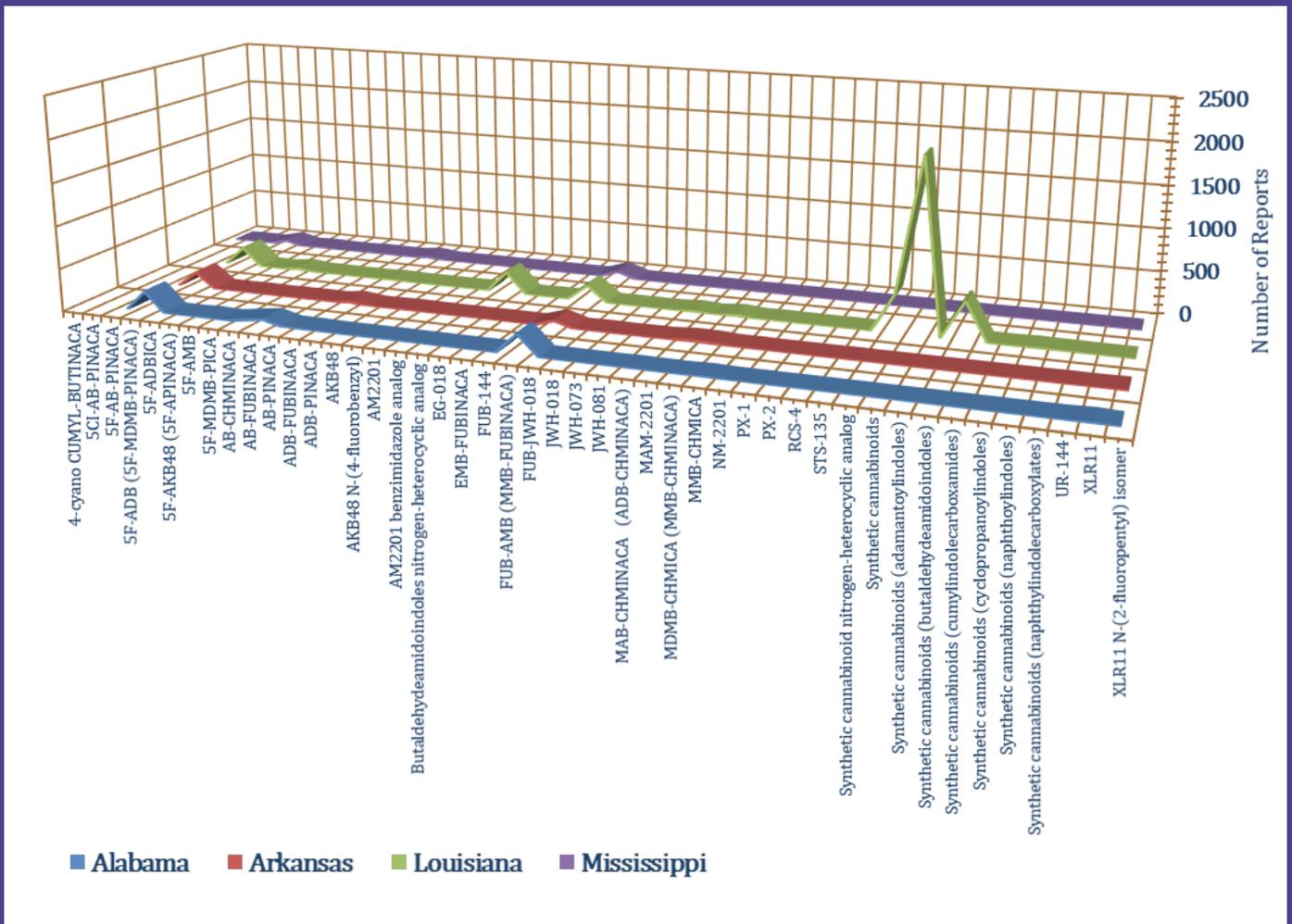


Source: DEA

# 2017 NFLIS Data for the DEA New Orleans Field Division

**Figure 13** presents counts of synthetic cannabinoid substances submitted to laboratories within the DEA New Orleans FD's AOR from January 1, 2017 through December 31, 2017. During 2017, state and local laboratories submitted 4,900 reports: 622 reports from Alabama (13 percent); 369 reports from Arkansas (7 percent); 3,713 reports from Louisiana (76 percent); and 196 reports from Mississippi (4 percent). Synthetic cannabinoids, 5F-ADB (5F-MDMB-PINACA), and FUB-AMB (MMB-FUBINACA) were the three most identified synthetic cannabinoid substances in 2017, as 2,026 reports of synthetic cannabinoids (41 percent); 688 reports of 5F-ADB (5F-MDMB-PINACA) (14 percent); and 587 reports of FUB-AMB (MMB-FUBINACA) (12 percent) were made. Louisiana laboratories submitted all 2,026 reports of synthetic cannabinoids.

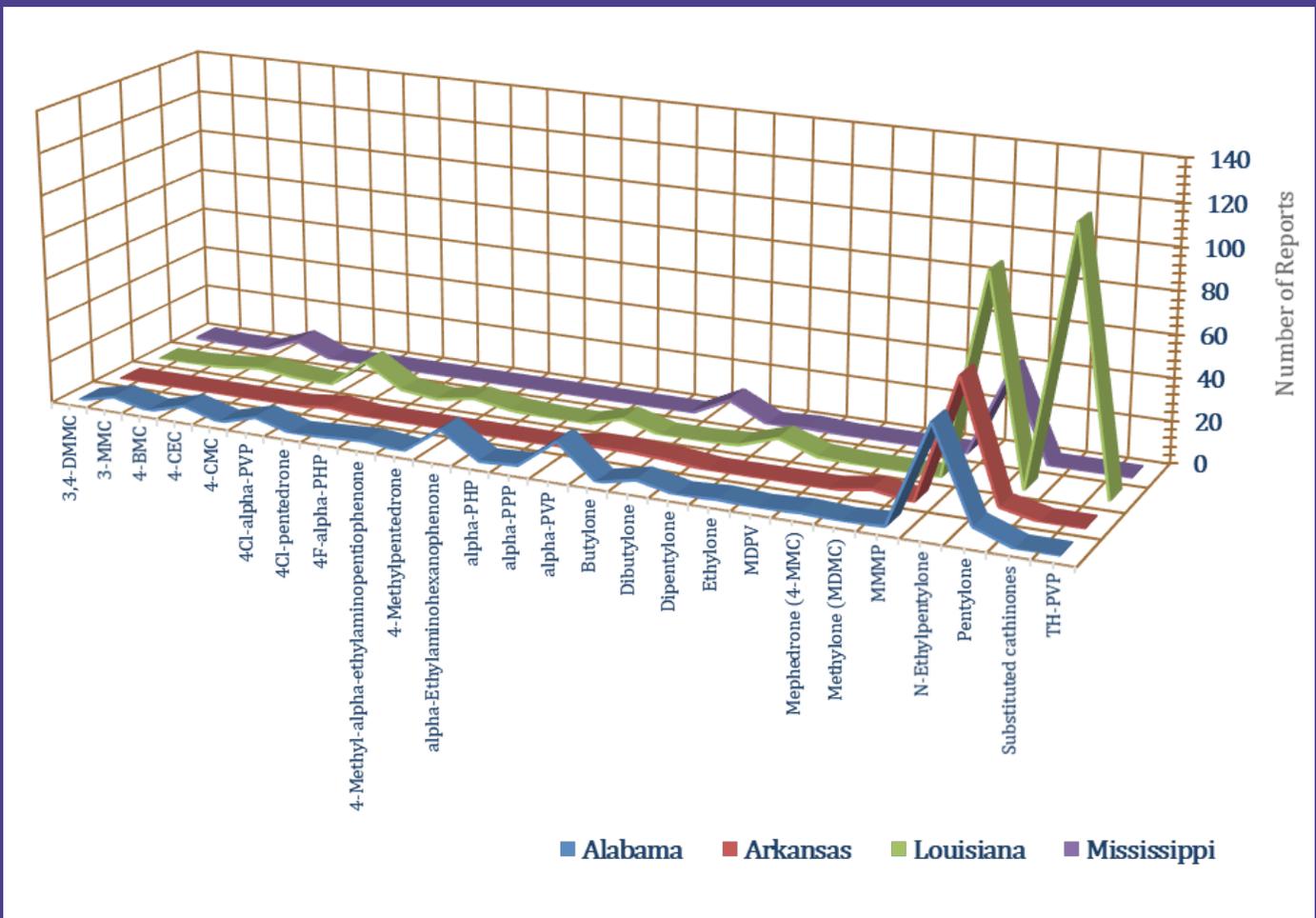
(U) Figure 13. 2017 DEA State Counts for Synthetic Cannabinoid Substances



Source: DEA

**Figure 14** represents counts of synthetic cathinones submitted to laboratories within the DEA New Orleans FD's AOR from January 1, 2017 through December 31, 2017. During 2017, state and local laboratories submitted 513 reports: 113 reports from Alabama (22 percent); 77 reports from Arkansas (15 percent); 263 reports from Louisiana (51 percent); and 60 reports from Mississippi (12 percent). N-ethylpentylone, substituted cathinones, and alpha-PVP were the three most identified synthetic cathinones. There were 249 reports of N-ethylpentylone (49 percent); 123 reports of substituted cathinones (24 percent); and 24 reports of alpha-PVP (5 percent) made during the period. Louisiana laboratories submitted all 123 reports of substituted cathinones.

**(U) Figure 14. 2017 DEA New Orleans Field Division: State Counts for Synthetic Cathinones**



Source: DEA

# Outlook

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The abuse of synthetic cannabinoids and cathinones remains a threat in the DEA New Orleans FD's AOR. These products have risen in popularity since their debut in 2008, particularly for individuals between 12 and 29 years of age. Sold as herbal incense, products such as K2, Spice, Genie, and Mojo are readily available in head shops, gas stations, and convenience stores throughout the region. Product inconsistency continues to pose health concerns for those who choose to use and abuse synthetic cathinones and cannabinoids. Lastly, synthetic manufacturers continue to modify the chemical make-up of these drugs to avoid legislative efforts at restricting the distribution of their products.

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(U) This product was prepared by the DEA Intelligence Program - New Orleans Division. Comments and questions may be addressed to the Office of Intelligence Programs at [DEA.IntelligenceProducts@usdoj.gov](mailto:DEA.IntelligenceProducts@usdoj.gov). For media/press inquiries call (202) 307-7977. *DFN-701-03--Destroy 2 years after issuance or when the DEA Intelligence Report is superseded or obsolete.*